

PROPOSED CAAPP PERMIT  
July 22, 2005

217/782-2113

"RENEWAL"  
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE:

Color Communications, Inc.  
Attn: Steve Winter  
4000 West Fillmore Street  
Chicago, Illinois 60624

I.D. No.: 031600BGU  
Application No.: 95090040

Date Received: February 2, 2004  
Date Issued: TO BE DETERMINED  
Expiration Date<sup>1</sup>: TO BE DETERMINED

Operation of: Paper Coating and Printing  
Source Location: 4000 West Fillmore Street, Chicago, Cook County  
Responsible Official: Steve Winter, President

This permit is hereby granted to the above-designated Permittee to OPERATE a paper coating and printing plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Anatoly Belogorsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:AB:psj

cc: Illinois EPA, FOS, Region 1  
CES  
Lotus Notes

<sup>1</sup> This permit contains terms and conditions that address the applicability, and, if determined applicable, substantive requirements of Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. The authority for these provisions is found in these regulations and in the general authority provided to the Illinois EPA by Section 9.1 of the Environmental Protection Act (Act) and Sections 39(a) and 39.5(7)(a) of the Act, which authorize the Illinois EPA to include conditions in permits that are required to accomplish the purposes of the Act. Any such terms and conditions are specifically identified within this permit as T1 conditions. These terms and conditions continue in effect as provided by Condition 8.7 of this permit, notwithstanding the expiration date specified above, as their authority derives from Title I, as well as from Title V of the CAA.

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**1.0 SOURCE IDENTIFICATION**

1.1 Source

Color Communications, Inc.  
4000 West Fillmore Street  
Chicago, Illinois 60624-3916  
(773) 638-1400

I.D. No.: 031600BGU  
Standard Industrial Classification: 2672;2759, Paper Coating and  
Printing

1.2 Owner/Parent Company

Color Communications, Inc.  
4000 West Fillmore Street  
Chicago, Illinois 60624-3916

1.3 Operator

Color Communications, Inc.  
4000 West Fillmore Street  
Chicago, Illinois 60624-3916

Contact Person: Pedro S. Caraballo  
(773) 638-1400

## 2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Color Matching Draw Down Machines  
Spray Booth (R and D Department)  
Latex Coating Mixers  
Laminating  
Color Matching of Latex  
Mounting Machines (12 units)

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

- a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].
- b. Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons provided that the tank is not used for the storage of gasoline or any listed hazardous air pollutant pursuant to Section 112(b) of the Clean Air Act [35 IAC 201.210(a)(10)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182.
- 3.2.4 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia, the Permittee shall comply with the applicable requirements of 35 IAC 218.122, which requires use of a permanent submerged loading pipe, submerged fill, a vapor recovery system, or an equivalent device approved by the Illinois EPA. [Note: storage tanks used for storing gasoline and any hazardous air pollutants are not illegible for insignificant activities].

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

#### 4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date of Construction	Emission Control Equipment
Coating Lines	Three Coating Lines with Natural Gas-Fired Ovens (See Section 7.5 for Ovens)	<u>Line #1 - 1993</u> <u>Line #3 - 1959,</u> Routed to an Afterburner in 1994  <u>Line #4 - 1985</u>	None  Permanent Total Enclosure and Catalytic Oxidizer For line 3  None
Lithographic Printing Lines	<u>Line #1</u> (5-Color Komori Press) <u>Line #2</u> (2-Color Heidelberg Press) <u>Line #3</u> (1-Color Miehle Press)	#1 - 1997  #2 - 1989  #3 - 1989	None  None  None
Flexographic Printing Lines	Two Flexographic Lines (#4 and #5)	#4 - 1989 #5 - 1997	None
Lacquer Color Matching Operations	No Emission Unit Associated with these Operations	N/A	None
Natural Gas-Fired Combustion Emission Units	Four Boilers (Nos. 1, 2, 4, 5) Three Ovens (Associated with Coating Lines Nos. 1, 3, 4)		None



## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

- 5.1.1 Color Communication, Inc. is located at 4000/4011/4242 West Fillmore Street in Chicago and produces color boards. The color board production consists of the paper/film coating and printing lines.
- 5.1.2 This source is located in an area that is non-attainment for ozone and PM<sub>2.5</sub> and attainment for other pollutants of the National Ambient Air Quality Standards.

### 5.2 Major Source Status

- 5.2.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM and HAP emissions.

### 5.3 Source-Wide Applicable Provisions and Regulations

- 5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.
- 5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:
  - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
  - b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
  - c. Pursuant to 35 IAC 237.102, no person shall cause or allow open burning, except the Illinois EPA may grant permits for open burning in accordance with 35 IAC 237.201.
- 5.3.3 Fugitive Particulate Matter Operating Program
  - a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)]. The Permittee shall comply with the fugitive particulate matter

operating program, submitted to the Illinois EPA and incorporated by reference into this permit, and any amendments to the program submitted pursuant to paragraph b below.

- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

#### 5.3.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.3.5 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

#### 5.3.6 Future Emission Standards

- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new regulations (see Condition 9.12.2).
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable regulations under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B that were promulgated after the date issued of this permit.
- c. This stationary source is subject to of 40 CFR 63 Subpart JJJJ and by December 5, 2005 shall comply with all applicable provisions of Subpart JJJJ. By December 5, 2005, the Permittee shall certify compliance with Subpart JJJJ and apply for appropriate modification of this permit reflecting such compliance and applicability of Subpart JJJJ. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required under a final and effective rule.

#### 5.3.7 Episode Action Plan

- a. Pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change,

pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

- d. A copy of the original plan and any subsequent revisions shall also be sent to the Chicago Department of Environmental Control.

#### 5.4 Source-Wide Non-Applicability of Regulations of Concern

This source is not subject to emission standards and requirements of 40 CFR Part 63 Subpart KK "National Emission Standards for Printing and Publishing Industry" because printing substrates used at this source for the flexographic printing is less than applicability criteria (18 inches), as established in 40 CFR 63.822.

#### 5.5 Source-Wide Control Requirements and Work Practices

General source-wide control requirements and work practices are not set for this source. However, there are source-wide requirements in the Standard Permit Conditions in Section 9. There may also be requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

#### 5.6 Source-Wide Production and Emission Limitations

##### 5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

##### Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	125.27
Sulfur Dioxide (SO <sub>2</sub> )	---
Particulate Matter (PM)	1.55
Nitrogen Oxides (NO <sub>x</sub> )	26.55
HAP, not included in VOM or PM	---
Total	153.37

##### 5.6.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

#### 5.6.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, state rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

#### 5.7 Source-Wide Testing Requirements

Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

#### 5.8 Source-Wide Monitoring Requirements

General monitoring requirements are not set for this source. However, there may be provisions for unit specific monitoring set forth in Section 7 of this permit.

## 5.9 Source-Wide Recordkeeping Requirements

### 5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

### 5.9.2 Records for Source-Wide Control Requirements and Work Practices

The Permittee shall keep copy of the fugitive particulate matter operating plan, and any amendments to the plan, as required by Condition 5.3. The Permittee shall also keep a record of activities completed according to the plan.

### 5.9.3 Records for HAP Emissions

The Permittee shall maintain records of HAP emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit, pursuant to Section 39.5(7)(b) of the Act.

### 5.9.4 Records for Other Source-Wide Emission Limitations

The Permittee shall maintain records of annual VOM emissions from the source-wide coating operations for purposes of verifying compliance with emission limits established in Condition 5.6.3. These records shall be calculated based on the procedures and equations established in Condition 7.1.12.

### 5.9.5 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

## 5.10 Source-Wide Reporting Requirements

### 5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

### 5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

## 5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source. However, there may be provisions for unit specific operational flexibility set forth in Section 7 of this permit.

## 5.12 Source-Wide Compliance Procedures

### 5.12.1 General Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be based on the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

## 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

### 6.1 Emissions Reduction Market System (ERMS)

#### 6.1.2 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

#### 6.1.2 Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.



#### 6.1.3 Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.5.
  - i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;
  - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;
  - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);
  - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and
  - v. VOM emissions from certain new and modified emission units as addressed by Condition 6.8(b), if applicable, in accordance with 35 IAC 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

#### 6.1.4 Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).
- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

#### 6.1.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.3, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
  - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
  - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

#### 6.1.6 Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in Sections 5 and 7 of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 IAC 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:
  - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
  - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

#### 6.1.7 Annual Account Reporting

- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:
  - i. Actual seasonal emissions of VOM from the source;
  - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
  - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;
  - iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
  - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and
  - vi. If a source is operating a new or modified emission unit for which three years of operational data is not

yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

- b. This report shall be submitted by November 30 of each year, for the preceding seasonal allotment period.

6.1.8 Allotment of ATUs to the Source

- a.
  - i. The allotment of ATUs to this source is 391 ATUs per seasonal allotment period.
  - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 44.3959 tons per season.
  - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.10 of this permit.
  - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
  - v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.
- b. Contingent Allotments for New or Modified Emission Units  

Not applicable.
- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:
  - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;
  - ii. Deduction of ATUs as a consequence of emission excursion compensation, in accordance with 35 IAC 205.720; and
  - iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

#### 6.1.9 Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 IAC 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

#### 6.1.10 Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:
  - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;
  - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
  - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.
- b. The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

Natural Gas-fired boilers and ovens

## 7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

### 7.1 Coating Lines

#### 7.1.1 Description

Four coating lines (4242 West Fillmore) apply latex and/or lacquer coating to paper and film substrate in the production of color boards.

#### 7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Coating Lines	Four Coating Lines with Natural Gas-Fired Ovens (See Section 7.5 for Ovens)		
	<u>Line #1</u>	#1 - 1993	None
	<u>Line #3</u>	#3 - 1959 (routed to an afterburner in 1994)	Permanent Total Enclosure and Catalytic Oxidizer For Line 3
	<u>Line #4</u>	#4 - 1985	None

#### 7.1.3 Applicable Provisions and Regulations

- An "affected coating line" for the purpose of these unit specific conditions is a paper coating operation that includes a coater operated either in the permanent total enclosure and controlled by the catalytic oxidizer or without VOM emissions control system.
- All affected coating lines operated without air pollution control device should either comply with the application of compliant coating as established by 35 IAC 218.204 (c) for paper coating or comply with a daily-weighted average VOM content limitations, as allowed by 35 IAC 218.205 (a). The following limitations are established for VOM content in paper coating:

i. 35 IAC 218.204 (c)

- A. No owner or operator of an affected coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

<u>kg/l</u>	<u>lb/gal</u>
0.28	2.3

- B. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

ii. 35 IAC 218.205(a)

For paper coating operations the daily-weighted average VOM content shall not exceed 0.28 kg VOM/l (2.3 lb VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied during any day.

- c. Affected coating line Nos. 3 is subject to 35 IAC 218.207(b) (1), which requires that the coating line be equipped with a capture system and control device that provides 81% reduction in the overall emissions of VOM and the control device is at least 90% efficient.

- d. The affected coating line #3 is subject to 35 IAC 212.322(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced prior to April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (See also Attachment 1) [35 IAC 212.322(a)].

- e. The affected coating lines Nos. 1, and 4 are subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination

with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

- f. Coating Line #3 is subject to requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. Condition 7.1.8 and Attachment 3 provide more details on this.

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected coating line is not subject to 35 IAC Subpart G: Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material, which excludes affected coating line from this requirement.
- b. The affected coating line is not subject 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the affected coating line is not by definition a fuel combustion emission unit.
- c. The affected coating line is not subject 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Units, because the affected coating line is not by definition a fuel combustion emission unit.
- d. This permit is issued based on the coating lines #1 and #4 operated at the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each line does not use an air pollution control device for controlling VOC and/or HAP emissions.

#### 7.1.5 Control Requirements and Work Practices

- a. The catalytic oxidizer shall be in operation at all times that the associated coating line Nos. 3 is in operation and applying non-compliant coating which exceeds the limits established by 35 IAC 218.204 (c) and 35 IAC 218.205(a). The afterburner shall not be seasonally shut down as would be allowed in 35 IAC 218.107.
- b. The permanent total enclosure and afterburner control system shall be operated in a manner consistent to good air pollution control practices and operating requirements established in 35 IAC 218, Appendix B, Procedure T "Criteria for and Verification of a Permanent or Temporary Total Enclosure".
- c. The Permittee shall, in accordance with manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance of the catalytic oxidizer such that oxidizer be



kept in proper working condition and not cause violation of the Environmental Protection Act or regulations promulgated therein.

- d. The Permittee shall replace the catalyst as needed in order to maintain the minimum required VOM destruction efficiency of 90% of the afterburner, pursuant to 35 IAC 218.207(h) (2) .
- e. This permit is issued based on the affective coating line #3 with an afterburner not being allowed to operate during malfunction or breakdown of an afterburner because the Permittee did not submit the proof to the Illinois EPA that such continued operation is necessary to prevent injury to persons or severe damage to equipment, or that such continued operation is required to provide essential services, pursuant to 35 IAC 201.262.

#### 7.1.6 Production and Emission Limitations

- a. Emissions and operation of the coating line #4 shall not exceed the following limits:

Total VOM Usage		VOM Emissions	
<u>(T/mo)</u>	<u>(T/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
3.65	25.50	3.65	25.50

The above limitations were established in Construction Permit 00080079, pursuant to 35 IAC Part 203. The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

- b. Emissions and operation of the coating line #1 shall not exceed the following limits:

Total VOM Usage		VOM Emissions	
<u>(T/mo)</u>	<u>(T/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
1.36	10.00	1.36	10.00

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected coating line #1 below the

levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N]. These limits are based on the maximum operating rate and application of coatings complying with Condition 7.1.3(b) (i) or (ii) of this permit.

- c. Emissions and operation of Coating Line #3 shall not exceed the following limits:

Lacquer Coating (gal/mo)    (gal/yr)		Average VOM Content (lbs/VOM per gal)	VOM Emissions (T/mo)    (T/yr)	
25,000	161,180	4.82	0.6	3.9

Latex Coating  
(gal/mo)    (gal/yr)

i. **Less Water**

30,000	40,200	1.99 (Less Water)	0.30	0.4
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i. **With Water**

95,240	127,620
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Totals	<u>0.90</u>	<u>4.3</u>
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The above limitations were established in Construction Permit 00080079, pursuant to 35 IAC Part 203. The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

- d. Compliance with all annual limits as established in Condition 7.1.6 shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 months total).

7.1.7 **Testing Requirements**

- a. Upon request from the Illinois EPA or USEPA the Permittee shall conduct tests in accordance with procedures of 35 IAC 218.105(d), (e), and (f). These tests shall be performed that will allow evaluation of compliance of the paper coating operations with 35 IAC 218.207(b) (1).
- b. The test shall be designed to measure both the destruction efficiency across the afterburner and the overall control efficiency provided by the combination of the capture system and destruction efficiency of the afterburner.

- c. The Procedure T shall be used to determine whether a permanent total enclosures meet the criteria of total enclosure, as described in 35 Ill. Adm. Code, Part 218, Appendix B.
- d. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A and 40 CFR 61, Appendix B for USEPA test methods.
 

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Volatile Organic Material	USEPA Method 25 or 25A
- e. This test shall be conducted during circumstances, which are representative of maximum emissions, and equipment data and material usage during the test shall be measured.
- f. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual date of test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- g. Copies of the Final Report (s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized.
- h. The Final Report shall include as a minimum:
  - i. A summary of results.
  - ii. General information.
  - iii. Description of test method (s), including description of sampling points, sampling train, analysis equipment, and test schedule.
  - iv. Detailed description of test conditions, including:
    - A. Process information, i.e., mode (s) of operation, process rate, e.g. fuel or raw material consumption;
    - B. Control equipment information, i.e., equipment condition and operating parameters during testing; and

- C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
  - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
  - vi. An explanation of any discrepancies among individual tests or anomalous data.
- i. Submittals of information shall be made as follows:
  - i. Notices of Test - one copy to the Regional Office and one copy to Compliance Section.
  - ii. Final Report - one copy to the Regional Office and one copy to Compliance Section.
- j. Testing for VOM content of coatings and other VOM containing materials shall be performed as follows [35 IAC 218.105(a), 218.211(a), and Section 39.5(7) (b) of the Act]:
  - i. Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on affected coating lines shall be determined according to USEPA Reference Method 24 of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a) and 218.211(a).
  - ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.1.9 directly reflect the application of such material and separately account for any additions of solvent.

#### 7.1.8 Monitoring Requirements

- a. Pursuant to 35 IAC 218.105(d) (2) (A) (ii), the catalytic afterburner shall be equipped with a USEPA approved continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor specifications at all times the afterburner is in use. This monitoring equipment shall monitor the temperature across each catalytic bed or VOM concentration of exhaust.
- b. Compliance Assurance Monitoring (CAM)

The catalytic afterburner used for affected coating line #3 is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The

Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3 pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information, as required by 40 CFR 64.9(b) (1).

- c. Monitoring of the VOM content limit of Condition 7.1.3(b) and (c) may be achieved by either fulfilling requirements established in Condition 7.1.7 or by keeping appropriate records required in Condition 7.1.9.

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected coating lines to demonstrate compliance with Conditions 5.6.1, 7.1.3, and 7.1.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 218.211(e) (2), the Permittee shall collect and record all of the following information each day for each coating line and maintain the information at the source:
  - i. Control device monitoring data;
  - ii. A log of operating time for the capture system, catalytic afterburner, monitoring equipment and the associated coating line; and
  - iii. A maintenance log for the capture system, catalytic afterburner and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- b. Records for demonstration compliance with 35 IAC 218.205(a) (daily-weighted average of VOM content). This information shall be collected and recorded each day for each coating line:
  - i. The name and identification number of each coating as applied on each coating line
  - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
  - iii. The daily-weighted average VOM content of all coatings as applied on each coating line as defined in 35 IAC 218.104.

- c. The Permittee shall maintain records of the following items for the affected coating lines to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:
  - i. The coating usage (gal/mo and gal/yr).
  - ii. The VOM content of each coating applied, % by wt.
  - iii. Density of each coating applied, lb/gal.
  - iv. Cleanup solvent usage (gal/mo and gal/yr) and the density of each solvent applied (lb/gal).
  - v. Records of the testing of VOM and HAP content of each coating and cleaning solvent as tested, pursuant to the conditions of this section, which include the following:
    - A. Identification of material tested;
    - B. Results of analysis;
    - C. Documentation of analysis methodology; and
    - D. Person performing analysis.
  - vi. The VOM emissions in tons/month and tons/year from each affected coating line and calculated based on the compliance procedures from Condition 7.1.12.
  - vii. Total VOM and HAP emissions in tons/month and tons/year from all affected coating lines calculated based on the recordkeeping requirements and compliance procedures established in Condition 7.1.12.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected coating line with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Conditions 7.1.3(b) and (c) (see also 35 IAC 218.204 (j)(3)) within 30 days of such an occurrence.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected coating line without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of coatings and clean-up solvents at this source with various VOM contents provided that the materials are tested in accordance with the conditions of this section, the source wide emission limitations in Conditions 5.6.1 and 5.6.3 are not exceeded and the affected coating line remains in compliance with Conditions 7.1.3 and 7.1.6.

#### 7.1.12 Compliance Procedures

- a. Compliance of the affected coating lines with the source wide emission limitations of Condition 5.6.1 and emission limitations established in Condition 7.1.6 shall be based on the recordkeeping requirements of Condition 7.1.9 and the following equations:

i. Uncontrolled VOM Emissions:

- A. VOM Emissions from Coating Operation (EI), T/mo and T/yr = Actual Coating Usage (gal/mo) x Coating Density (lb/gal) x VOM Content of the Coating (wt. %);
- B. VOM Emissions from Cleanup Operation (EII), T/mo and T/yr = (Actual Clean-up Solvent Usage (gal/mo) x Solvent Density (lb/gal)); and
- C. Total VOM Emissions (T/mo and T/yr) = EI + EII

ii. VOM Emissions after Control

- A. VOM Emissions from Coating Operation (EI), T/mo and T/yr = [Actual Coating Usage (gal/mo) x Coating Density (lb/gal) x VOM Content of the Coating (wt. %)] x [(100 - destruction efficiency, %)/100 x (capture efficiency, %)/100];
- B. VOM Emissions from Cleanup Operation (EII), T/mo and T/yr = (Actual Clean-up Solvent Usage (gal/mo) x Solvent Density (lb/gal) x [(100 - destruction efficiency, %)/100 x (capture efficiency, %)/100]); and
- C. Total VOM Emissions (T/mo and T/yr) = EI + EII.

- b. Compliance of the affected coating line with VOM emission limitations in Condition 7.1.3(b) and (c) shall be based on the recordkeeping requirements in Condition 7.1.9 and by the use of either testing as required in Condition 7.1.7 or by use of the formula listed below:

$$\text{VOM Coating Content} = V \times D / [1 - W \times D],$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \sum (w_i / d_i)$$

Where:

w<sub>i</sub> = Percent exempt compound i in the coating,

d<sub>i</sub> = Overall density of exempt compound i, lb/gal and the summation  $\Sigma$  is applied over water and all exempt compounds i in the coating.

- c. Compliance of the affected coating line with VOM emission limitations in Condition 7.1.3(b)(ii) shall be based on the recordkeeping requirements in Condition 7.1.9 and by use the following equation, as defined in 35 IAC 211.1670:

$$\text{VOM}_w = \left[ \sum_{i=1}^n V_i C_i \right] / V_T$$

Where:

VOM<sub>w</sub> = The average VOM content of two or more coatings as applied each day on a coating line in units of kg VOM/l (lb VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

n = The number of different coatings as applied each day on a coating line;

V<sub>i</sub> = The volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on a coating line in units of l (gal);

C<sub>i</sub> = The VOM content of each coating as applied each day on a coating booth in units of kg VOM/l (lb VOM/gal) of coating (minus water and any



compounds which are specifically exempted from the definition of VOM); and

$V_T$  = The total volume of all coatings (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on a coating line in units of 1 (gal).

- d. Compliance with the overall control efficiency requirement under Condition 7.1.3(c) shall be based on the latest measurement of destruction efficiency of the catalytic oxidizer controlling coating lines, and the latest verification test of the permanent total enclosure.
- e. Compliance with the particulate matter limitations of Condition 7.1.3(d) and (e) is assured and achieved by the work practices inherent in operation of the affected coating lines.

## 7.2 Sheet-Fed Offset Lithographic Printing Lines

### 7.2.1 Description

The substrate for lithographic printing is unpainted sheets of paper.

### 7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Printing Lines	Sheet-Fed Offset Lithographic Printing Lines		
	Line #1 (5-Color Komori Press)	#1 - 1997	None
	Line #2 (2-Color Heidelberg Press)	#2 - 1989	None
	Line#3 (1-Color Miehle Press)	#3 - 1989	None

### 7.2.3 Applicable Provisions and Regulations

- a. An "affected lithographic printing line" for the purpose of these unit specific conditions is a sheet-fed offset lithographic printing press which is used for printing on the paper substrate.
- b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into atmosphere from each affected lithographic printing line unless non-photochemically reactive materials are used [35 IAC 218.301].
- c. Coating/varnish operation performed on the affected lithographic printing lines at the source is subject to limitations of 35 IAC 218.204(c) for paper coating, which provides that:
  - i. No owner or operator shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the coating as applied to paper and paper products. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM), as applied:

<u>kg/l</u>	<u>lb/gal</u>
0.28	2.3

- ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.
- d. Each affected lithographic printing line is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

#### 7.2.4 Non-Applicability of Regulations of Concern

- a. The affected lithographic printing lines are not subject to 35 IAC 218.407 through 218.410 because the combined emissions of VOM from all lithographic printing lines (including solvents used for cleanup operations associated with the lithographic printing) before capture and control never exceed 45.5 kg/day (100 lbs/day), determined in accordance with 35 IAC 218.411(a) (1) (B) [35 IAC 218.405(d) (2)].
- b. If the total VOM emissions from affected lithographic printing lines exceed 100 lbs/day before capture and control, these lines become subject to limitations of 35 IAC 218.407, and affected lithographic printing lines at the source are always subject to the applicable provisions of Subpart H [35 IAC 218.405(e)].
- c. This permit is issued based on the affected lithographic printing lines operated at the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the lines do not use an air pollution control device for controlling emissions of regulated air pollutants.

#### 7.2.5 Control Requirements and Work Practices

Control requirements are not set for these unit specific emission units. However, there are source-wide requirements in the Standard Permit Conditions in Section 9. There may also be requirements for general source-wide control requirements set forth in Condition 5.5.

#### 7.2.6 Production and Emission Limitations

- a. Total actual VOM emissions from all printing activities associated with affected lithographic printing lines at this source shall not exceed 100 lbs/day. Compliance with this limit should be demonstrated through appropriate recordkeeping requirements in Condition 7.2.9(a) and compliance procedures of Condition 7.2.12(a).
- b. Emissions of VOM and operation of the affected lithographic printing lines shall not exceed the following limits:
  - i. Printing Line #1

<u>Material</u>	<u>Usage</u>		<u>VOM</u>	<u>VOM Emissions</u>	
	<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>Content</u> <u>(lb/gal)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
Inks	4,194	25,166	2.40	0.25	1.51
Varnishes	334	2,000	1.80	0.30	1.80
Fountain Solution	500	3,000	0.07	0.02	0.11
Cleanup Solvents	580	3,500	3.77	<u>1.09</u>	<u>6.60</u>
			Total:	1.66	10.02

The above limitations had been carried from initial CAAPP permit and contain revisions to previously issued Construction Permit 97120039, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, allowable ink usage being increased without any increase of VOM emissions. These new limits reflect 95% retention for coldset inks used on the printing line #1 [T1]. Compliance with annual limits shall be determined from a running total of 12 months of data.

ii. Printing Lines #2 and #3 (Combined)

<u>Material</u>	<u>Usage</u>		<u>VOM</u>	<u>VOM Emissions</u>	
	<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>Content</u> <u>(lb/gal)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
Inks	500	3,000	2.40	60.0	0.18
Varnishes	9	50	1.80	16.2	0.05
Fountain Solution	17	100	0.07	1.2	0.01
Cleanup Solvents	17	100	0.68	<u>11.3</u>	<u>0.04</u>
			Total:	88.7	0.28

The above limitations had been carried from initial CAAPP permit and contain revisions to previously issued Construction Permit 97120039, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, allowable ink usage being increased without any increase of VOM emissions. These new limits reflect 95% retention for coldset inks used on the printing line #1 [T1]. Compliance with annual limits shall be determined from a running total of 12 months of data.

7.2.7 Testing Requirements

For purposes of verifying compliance with VOM emission limits established in Conditions 5.6.1 and 7.2.6 of this permit, the following testing procedures are established:

- a. Upon request from the Illinois EPA or USEPA, testing of the VOM content of fountain solutions, fountain solution additives, cleaning solvents, cleaning solutions, inks, and varnish shall be conducted, as follows:
  - i. The applicable test methods and procedures specified in 35 IAC 218.105(a) shall be used, provided, however, Method 24 shall be used to demonstrate compliance; or

- ii. The manufacturer's specifications for VOM content for fountain solution additives, cleaning solvents, inks and varnish may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 IAC 218.105(a), provided, however, Method 24 shall be used to determine compliance.
- b. Upon request from the Illinois EPA or USEPA the percent concentration of solvent in the VOM containing waste from affected lithographic printing lines shall be determined in accordance with USEPA Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW-846), Test Method 8260.

#### 7.2.8 Monitoring Requirements

Monitoring requirements are not set for the affected lithographic printing lines. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

#### 7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected lithographic printing lines to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall collect and record either of the following data identified in Conditions 7.2.9(a)(i) and 7.2.9(a)(ii) for all affected printing lines which are exempted from limitations of 35 IAC 218.407 pursuant to 35 IAC 218.411(2):
  - i. Standard recordkeeping, including the following:
    - A. The name and identification of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
    - B. A daily record which shows whether a lithographic printing line at the source was in operation on that day;
    - C. The VOM content and the volume of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
    - D. The total VOM emissions from all lithographic printing lines each month determined as the sum

of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the printing lines; and

- E. The VOM emissions in lbs/day for the month, calculated in accordance with 35 IAC 218.411 (a) (1) (B) .

ii. Purchase and inventory recordkeeping, including the following:

- A. The name, identification, and VOM content of each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line, recorded each month;
- B. Inventory records from the beginning and end of each month indicating the total volume of each fountain solution additive, lithographic ink, and cleaning solvent to be used on any lithographic printing line at the source;
- C. Monthly purchase records for each fountain solution additive, lithographic ink, and cleaning solvent used on any lithographic printing line at the source;
- D. A daily record which shows whether a lithographic printing line at the source was in operation on that day;
- E. The total VOM emissions from all lithographic printing lines each month determined as the sum of the product of usage and VOM content for each fountain solution additive, cleaning solvent, and lithographic ink (with the applicable ink VOM emission adjustment) used at the source, calculated each month based on the monthly inventory and purchase records required to be maintained pursuant to 35 IAC 218.411(a) (2) (B) (i), B(ii), and B(iii); and
- F. The VOM emissions in lbs/day for the month, calculated in accordance with 35 IAC 218.411 (a) (1) (B) .

- b. For the purposes of verifying compliance with the limits contained in Conditions 5.6.1 and 7.2.6 of this permit, the Permittee shall collect and record the following information on affected lithographic printing lines subject to these limitations:

- i. Monthly usage of each ink, fountain solution, cleaning solution, and varnish (lb/month);
- ii. The VOM content (wt. %) of each ink, fountain solution, cleaning solution, and varnish used and accompanied by a copy of the supporting information (e.g., supplier data sheet or laboratory analysis report);
- iii. The amount of manifested waste generated or solvents reclaimed on the affected lithographic printing lines in units gal/month and gal/year;
- iv. The average density lb/gal and wt.% of VOM in the manifested waste or reclaimed solvents; and
- v. VOM emissions for printing line #1 and printing lines #2 and #3 calculated in accordance with procedures given in Condition 7.2.12 for the current month plus preceding 11 months.

#### 7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected lithographic printing lines with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The Illinois EPA shall be notified when:

- a. The Permittee shall notify the Illinois EPA in writing if the combined emissions of VOM from all affected lithographic printing lines (including inks, fountain solutions, and solvents used for cleanup operations associated with a lithographic printing lines) at the source ever exceed 45.5 kg/day (100 lbs/day), before the use of capture systems and control devices, within 30 days after the event occurs. Such notification shall include a copy of all records of such event; and
- b. The Permittee shall notify the Illinois EPA in writing if the production and or emission limitations contained in Condition 7.2.6 are exceeded, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected printing line without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's



obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of inks, varnishes, fountain solution, and clean-up solvents on affected lithographic printing lines with various VOM contents, provided that the Permittee continues to comply with the emission limitations in Conditions 5.6.1 and 7.2.6 of this permit.

#### 7.2.12 Compliance Procedures

Compliance of the affected printing lines with emission limitations of this permit shall be based on the recordkeeping requirements of Condition 7.2.9 and the following emission factors and formulas listed below:

- a. Compliance with a daily VOM emission limitations (less than 100 lbs/day of total VOM emissions before capture and control) shall be determined based on the following:
  - i. To calculate total daily emissions of VOM, the Permittee shall determine the monthly emissions of VOM from all affected lithographic printing lines at the source (including solvents used for cleanup operations associated with lithographic printing lines) and divide this amount by the number of days during that calendar month that printing lines at the source were in operation;
  - ii. To determine VOM emissions from inks used on lithographic printing lines at the source, an ink emission adjustment factor of 0.05 shall be used in calculating emissions from all non-heatset inks to account for VOM retention in the substrate; and
  - iii. To determine VOM emissions from fountain solutions and cleaning solvents used on lithographic printing lines at the source, no retention factor is used.
- b. Compliance of the affected printing lines with VOM content emission limitation in Condition 7.2.3(c) for applied varnish shall be based on the recordkeeping requirements in Condition 7.2.9 and by use of equations listed below:

$$\text{VOM Coating Content} = V \times D / [1 - W \times D]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \sum (w_i / d_i)$$

Where:

$w_i$  = Percent exempt compound  $i$  in the coating,

$d_i$  = Overall density of exempt compound  $i$ , lb/gal

and the summation  $\Sigma$  is applied over water and all exempt compounds  $i$  in the coating.

- c. Compliance with annual VOM emission limits in Conditions 5.6.1 and 7.2.6(b) shall be determined by using the emission factors and formulas listed below:
  - i. The Permittee may presume 95% retention of coldset ink VOM in substrate, as stated in 35 IAC 218.411(a)(1)(B)(iii);
  - ii. VOM Emissions from Ink = VOM Ink Usage  $\times$  0.05;
  - iii. VOM Emissions from Fountain Solution = VOM Fountain Solution Usage;
  - iv. VOM Emissions from Cleaning Solution = VOM Cleaning Solution Usage;
  - v. VOM Emissions from Varnish = Varnish Usage  $\times$  VOM Content (wt. %); and
  - vi. Total VOM Emissions = Aggregation of ii through v.

### 7.3 Flexographic Printing Lines

#### 7.3.1 Description

Flexographic printing is performed on rolls of web from 6 to 16 inches in width. The web is fed to the presses at a nominal rate of 200 ft. Per minute. Either an alcohol-based ink or UV based ink is utilized.

#### 7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Flexographic Printing Lines	Two Flexographic Lines (#4 and #5)	#4 - 1989 #5 - 1997	None None

#### 7.3.3 Applicable Provisions and Regulations

- a. An "affected flexographic printing line" for the purpose of these unit-specific conditions is a printing operation that includes flexographic printing press which is used to apply inks to the paper.
- b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into atmosphere from each affected flexographic printing line unless non-photochemically reactive materials are used [35 IAC 218.301].
- c. Each affected flexographic printing line is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 2) [35 IAC 212.321(a)].

#### 7.3.4 Non-Applicability of Regulations of Concern

- a. Affected flexographic printing lines (including solvents used for cleanup operations associated with flexographic printing line(s)) are exempted from the limitations of 35 IAC 218.401 because maximum theoretical emissions and potential to emit of VOM are less than 100 t/year and 25 t/year, respectively, from all affected flexographic printing lines [35 IAC 218.402(a)].

- b. Affected flexographic printing lines are not subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for the flexographic and rotogravure printing, 40 CFR 63 Subpart KK, because these lines do perform printing on the web up to 16 inches wide and therefore being exempt from the definition of the "wide-web flexographic press" under Subpart KK.
- c. This permit is issued based on the each affected flexographic printing lines operated at the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because these lines do not use an air pollution control device for controlling emissions of regulated air pollutants.

#### 7.3.5 Control Requirements and Work Practices

Control requirements are not set for these unit specific emission units. However, there are source-wide requirements in the Standard Permit Conditions in Section 9. There may also be requirements for general source-wide control requirements set forth in Condition 5.5.

#### 7.3.6 Production and Emission Limitations

Total combined emissions and operations of the flexographic printing lines #4 and #5 shall not exceed the following limits:

- a. Material Usage shall not exceed the following limits:

Material	Usage	
	<u>(gal/mo)</u>	<u>(gal/yr)</u>
Inks/Varnishes	41	230
Cleanup Solutions (Partial VOM)	40	230
Cleanup Solvents	37	230

- b. Total VOM emissions shall not exceed 535 lb/month and 1.6 ton/yr.
- c. The above limitations had been carried from initial CAAPP permit and contain revisions to previously issued Construction Permit 97120039, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this construction permit and the information in the CAAPP application contains the most

current and accurate information for the source. Specifically, material usage being decreased and VOM content limits being drop without increase of total VOM emissions [T1]. Compliance with annual limits shall be determined from a running total of 12 months of data.

7.3.7 Testing Requirements

Upon reasonable request by the Illinois EPA, the VOM content of specific inks, varnishes, thinners, and cleaning solvents applied on the affected printing lines shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedure of 35 IAC 218.105(a).

7.3.8 Monitoring Requirements

Monitoring requirements are not set for the affected shot blasters. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected shot blasters to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall collect and record all of the following information each year for each printing line pursuant to 35 IAC 218.404(b)(2):
  - i. The name and identification number of each ink as applied on each printing line; and
  - ii. The VOM content and the volume of each ink as applied each year on each printing line.
- b. The Permittee shall collect and record all of the following information for affected printing lines for verifying compliance with the limits contained in Condition 7.3.6:
  - i. Usage of each ink/varnish, cleaning solvents, and any other VOM containing materials on a monthly and annual basis in terms of pounds per month and tons per year;
  - ii. The VOM content of each ink/varnish, cleaning solvent, and any other VOM containing materials used in terms of % VOM by weight and accompanied by a copy of supporting information, e.g., supplier data sheet or laboratory analysis report; and

- iii. Total VOM emissions from each affected printing line, calculated in accordance with procedure given in Condition 7.3.12, on a monthly and annual basis in terms of tons per month and tons per year.

#### 7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected lithographic printing lines with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The Illinois EPA shall be notified when:

- a. The Permittee shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all flexographic printing lines exceed 100 t/year in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
- b. The Permittee shall notify the Illinois EPA in writing if the production and or emission limitations contained in Condition 7.3.6 are exceeded, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

#### 7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected flexographic printing lines without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of inks/varnishes or cleaning solvents at these lines with various VOM contents provided that the source wide emission limitations in Condition 5.5.1 and emission limitations in Condition 7.3.6 are not exceeded and the affected lines remain in compliance with Condition 7.3.3(b).

#### 7.3.12 Compliance Procedures

Compliance with the emission limits of Conditions 5.6.1 and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and calculated based on the following:

Ink VOM Emissions = Ink/Varnish Usage x VOM Content (wt. %)

Cleaning Solvent VOM Emissions = Cleaning Solvent Consumption

Total VOM Emissions = Ink/Varnish VOM Emissions + Cleaning  
Solvent VOM Emissions

#### 7.4 Lacquer Color Matching Operations

##### 7.4.1 Description

Thousands different colors are formulated to match customer's needs during a year. This process includes both computer and manual matching of colors and often involves 10 to 25 iterations of adding color pigments to arrive at the exact color match. The thinning of lacquer is generally done in color matching as the proper viscosity has an important bearing on the correct color. Color matching of latex paints is not included in this operation.

##### 7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Lacquer Color Matching Operations	No Emission Unit Associated with these Operations	N/A	None

##### 7.4.3 Applicable Provisions and Regulations

- a. An "affected color matching operations" for the purpose of these unit-specific conditions is an operation designed to match customer's needs during a year prior to application on the coating lines.
- b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into atmosphere from color matching operations unless non-photochemically reactive materials are used [35 IAC 218.301].
- c. Affected color matching operations are subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

##### 7.4.4 Non-Applicability of Regulations of Concern

- a. Affected color matching operations are exempted from the requirements of 35 IAC Part 218, Subpart TT "Other Emission Units" because maximum theoretical emissions and potential to emit of VOM are limited to less than 25 t/year by



Condition 7.4.6 of this permit [35 IAC 218.980(a) and (b)].

- b. This permit is issued based on the affected color matching operations at the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because these lines do not use an air pollution control device for controlling emissions of regulated air pollutants.

#### 7.4.5 Control Requirements and Work Practices

Control requirements are not set for these unit specific emission units. However, there are source-wide requirements in the Standard Permit Conditions in Section 9. There may also be requirements for general source-wide control requirements set forth in Condition 5.5.

#### 7.4.6 Production and Emission Limitations

Total combined emissions of the affected lacquer color matching operations shall not exceed the following limits:

<u>Lacquer Colors Matched</u> <u>(Colors/mo)</u>	<u>(Colors/yr)</u>	<u>VOM Usage</u> <u>(lb VOM/Color)</u>	<u>VOM Emissions</u> <u>(T/mo)</u>	<u>(T/yr)</u>
2,500	25,000	0.96	1.2	12.0

The above limitations had been established in the initial CAAPP permit 95090040 pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the potential emissions of VOM from color matching operations below the levels that would trigger applicability of these rules along with 35 IAC Part 218, Subpart TT, consistent with the information provided in the CAAPP application [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) and calculated based on the compliance procedures in Condition 7.4.12.

#### 7.4.7 Testing Requirements

Upon reasonable request by the Illinois EPA, the VOM content of specific inks, varnishes, thinners, and cleaning solvents applied on the affected printing lines shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedure of 35 IAC 218.105(a).

#### 7.4.8 Monitoring Requirements

Monitoring requirements are not set for the affected lacquer color matching operations. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

#### 7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected lacquer color matching operations to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Amount of processed matched colors per month and per year;
- b. The VOM usage for each processed match color; and
- c. Total VOM emissions from affected color matching operations, calculated in accordance with procedure given in Condition 7.4.12, on a monthly and annual basis in terms of tons per month and tons per year.

#### 7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected lithographic printing lines with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The Illinois EPA shall be notified in writing when:

The production and or emission limitations contained in Conditions 7.4.3(b) and 7.4.6 are exceeded, within 30 days after the event occurs. Such notification shall include a copy of all records of such event.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected lacquer color matching operations without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of inks, coatings, and other VOM containing materials for color matching operations with various VOM contents provided that the source wide emission limitations in Condition 5.6.1 and limitations in Condition 7.4.6 are not exceeded and the affected

color matching operations remain in compliance with Condition 7.4.3(b).

7.4.12 Compliance Procedures

Compliance with the emission limits of Conditions 5.6.1 and 7.4.6 shall be based on the recordkeeping requirements in Condition 7.4.9 and calculated based on the following:

VOM Emissions = Lacquer Colors Matched x VOM Usage/Color

## 7.5 Natural Gas-Fired Combustion Emission Units

### 7.5.1 Description

Natural gas-fired ovens are used to thermally dry coatings.  
Natural gas-fired boilers are used to produce steam and comfort heating at this source.

### 7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Natural Gas-Fired Combustion Emission Units	Four Boilers (Nos. 1, 2, 4, and 5)		None
	Three Ovens (Associated with Coating Lines Nos. 1, 3, and 4)		None

### 7.5.3 Applicable Provisions and Regulations

An "affected natural gas-fired combustion emission unit" for the purpose of these unit specific conditions is either a natural gas-fired boiler which is used to produce steam or comfort heating at the source or a natural gas-fired oven used to thermally dry coatings.

### 7.5.4 Non-Applicability of Regulations of Concern

- Affected natural gas-fired combustion emission unit is not subject to 35 IAC 217.141, Emissions of Nitrogen Oxides From Existing Fuel Combustion Emission Sources In Major Metropolitan Areas, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr).
- Affected natural gas-fired combustion emission unit is not subject to 35 IAC 216.121, Fuel Combustion Emission Sources, because the actual heat input from each unit is less than 2.9 MW (10 mmBtu/hr).
- Pursuant to 35 IAC 218.303, any fuel combustion emission units are not subject to 35 IAC Part 218, Subpart G: Use of Organic Material.
- This permit is issued based on the natural gas-fired combustion emission unit operated at the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because such units do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.5 Control Requirements and Work Practices

Control requirements are not set for affected natural gas-fired combustion emission units. However, there are source-wide requirements in the Standard Permit Conditions in Section 9. There may also be requirements for general source-wide control requirements set forth in Condition 5.5.

7.5.6 Production and Emission Limitations

Total emissions and operation of all affected natural gas-fired combustion emission units shall not exceed the following limits:

Natural Gas Usage		NO <sub>x</sub> Emissions	
(mmscf/mo)	(mmscf/yr)	(T/mo)	(T/yr)
100.0	490.0	5.0	24.5

The above limitations were established in Permit 95020065, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

Compliance with annual limits shall be determined from a running total of 12 months of data.

7.5.7 Testing Requirements

Testing requirements are not set for the affected natural gas-fired combustion emission units. However, there are general testing requirements in Conditions 5.7 and 8.5.

7.5.8 Monitoring Requirements

Monitoring requirements are not set for the affected natural gas-fired combustion emission units. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected boiler to demonstrate compliance with Conditions 5.6.1 and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage, in terms of mmscf /month (or therms/month) and mmscf/year (or therms/year).
- b. Emissions of regulated air pollutants in tons/month and tons/year from the affected boiler calculated based on the

recordkeeping requirements and compliance procedures from Condition 7.5.12.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected boiler with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected natural gas-fired combustion emission units. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.5.12 Compliance Procedures

Compliance with the emission limits established in Conditions 5.6.1 and 7.5.6 of this permit shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Natural Gas Emissions Factors (lb/10<sup>6</sup> ft<sup>3</sup>)</u>
PM	7.6
NO <sub>x</sub>	100
SO <sub>2</sub>	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in small boilers (<100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, March 1998.

Emissions (lb) = Natural Gas Consumed Multiplied by the Appropriate Emission Factor.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after \_\_\_\_\_ (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

## 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA



every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7) (f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

#### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7) (a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

- i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency  
Bureau of Air  
Compliance & Enforcement Section (MC 40)  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency  
Bureau of Air  
Air Quality Planning Section (MC 39)  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
1021 North Grand Avenue East  
P.O. Box 19506  
Springfield, Illinois 62794-9506

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

#### 9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

#### 9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

#### 9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

#### 9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

### 9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

##### 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

##### 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

##### 9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

## 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

## 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed



description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

##### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5) (e) and (i) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7) (o) (v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

#### 9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5) (1) and (o) of the Act].

Note: Pursuant to Sections 39.5(5) (h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

## 10.0 ATTACHMENTS

### Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Attachment 2 Emissions of Particulate Matter from Process Emission Units

- a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].
- b. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- i. The emissions of particulate matter into the atmosphere in any one hour period from the affected coating lines shall not exceed the allowable emission rates specified in the following equation:

$$E = A (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

- ii. For process weight rates of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- iii. For process weight rates in excess of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c. Limits for Process Emission Units for which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

Table 3.1 - PSEU Designation:

Significant Emission Unit  
Section:

Pollutant:

Coating Line #3 with a Catalytic  
Oxidizer

7.1

VOM

Indicators:

#1: Afterburner  
Chamber Temperature

#2: Inspection of  
Ducts to the  
Afterburner

GENERAL CRITERIA

THE MONITORING APPROACH USED  
TO MEASURE THE INDICATORS:

Continuous  
temperature recording  
of the inlet  
temperature to  
afterburner

Weekly  
inspections

THE INDICATOR RANGE WHICH  
PROVIDES A REASONABLE  
ASSURANCE OF COMPLIANCE:

The inlet temperature  
shall be greater than  
600°F

All ductwork are  
intact and no  
breaks

QUALITY IMPROVEMENT PLAN (QIP)  
THRESHOLD LEVELS:

100% of the time the  
inlet temperature  
stays above 600°F

100% of the time  
all ductwork are  
intact

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR  
OBTAINING REPRESENTATIVE DATA:

Temperature sensor is  
located at the  
afterburner inlet

N/A

VERIFICATION PROCEDURES TO  
CONFIRM THE OPERATIONAL STATUS  
OF THE MONITORING:

The temperature  
indicator is checked  
once per shift

Manual inspection

QUALITY ASSURANCE AND QUALITY  
CONTROL (QA/QC) PRACTICES THAT  
ENSURE THE VALIDITY OF THE  
DATA:

The temperature gauge  
is checked once per  
shift

N/A

THE MONITORING FREQUENCY:

Continuous

Weekly

THE DATA COLLECTION PROCEDURES  
THAT WILL BE USED:

Temperature chart  
recorder

Recorded visual  
inspection

THE DATA AVERAGING PERIOD FOR  
DETERMINING WHETHER AN  
EXCURSION OR EXCEEDANCE HAS  
OCCURRED:

N/A

N/A

#### Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, [www.epa.state.il.us](http://www.epa.state.il.us). This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

##### Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

##### Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)

[www.epa.state.il.us/air/permits/197-fee.pdf](http://www.epa.state.il.us/air/permits/197-fee.pdf)

AB:psj